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| APPLICATION NO.        | F          | ILING DATE    | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |  |
|------------------------|------------|---------------|----------------------|---------------------|------------------|--|
| 10/663,726             | 09/17/2003 |               | Yuichi Kubo          | 740107-173          | 2222             |  |
| 25570                  | 7590       | 03/03/2006    | EXAMINER             |                     |                  |  |
| ROBERTS<br>P. O. BOX 1 | •          | KOWSKI & HOBI | HEINRICH,            | HEINRICH, SAMUEL M  |                  |  |
| MCLEAN, VA 22102-8064  |            |               |                      | ART UNIT            | PAPER NUMBER     |  |
| ,                      |            |               |                      | 1725                | -                |  |

DATE MAILED: 03/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

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| '  | Application No.   | Applicant(s)   |
|--|---|--|
|  | 10/663,726  | KUBO ET AL.  |
| Office Action Summary  | Examinér  | Art Unit   |
| ·  | Samuel M. Heinrich  | 1725   |
| The MAILING DATE of this communication app<br>Period for Reply   | ears on the cover sheet with the c  | orrespondence address  |
| A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b). | ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tim vill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE | N. nely filed the mailing date of this communication. D (35 U.S.C. § 133). |
| Status   |   |  |
| <ol> <li>Responsive to communication(s) filed on 14 December 2a) This action is FINAL.</li> <li>Since this application is in condition for allower closed in accordance with the practice under Exercise 1.</li> </ol>   | action is non-final.<br>nce except for formal matters, pro  |  |
| Disposition of Claims  |   |  |
| <ul> <li>4) ☐ Claim(s) 1-15 is/are pending in the application.</li> <li>4a) Of the above claim(s) is/are withdraw</li> <li>5) ☐ Claim(s) is/are allowed.</li> <li>6) ☐ Claim(s) 1-15 is/are rejected.</li> <li>7) ☐ Claim(s) is/are objected to.</li> <li>8) ☐ Claim(s) are subject to restriction and/or</li> </ul>   | vn from consideration.  |  |
| Application Papers   |   | •  |
| 9) ☐ The specification is objected to by the Examine 10) ☑ The drawing(s) filed on 17 September 2003 is/a  Applicant may not request that any objection to the ore Replacement drawing sheet(s) including the correction 11) ☐ The oath or declaration is objected to by the Examine 11.   | re: a)⊠ accepted or b)⊡ object<br>drawing(s) be held in abeyance. See<br>ion is required if the drawing(s) is obj   | e 37 CFR 1.85(a).<br>ected to. See 37 CFR 1.121(d).                        |
| Priority under 35 U.S.C. § 119   |   |  |
| a) All b) Some * c) None of:  1. Certified copies of the priority documents 2. Certified copies of the priority documents 3. Copies of the certified copies of the prior application from the International Bureau * See the attached detailed Office action for a list of   | s have been received. s have been received in Application ity documents have been received (PCT Rule 17.2(a)).  | on No ed in this National Stage  |
| Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  Paper No(s)/Mail Date   | 4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal Pa   |  |
| Patent and Trademark Office  |   |  |

Application/Control Number: 10/663,726

Art Unit: 1725

### **DETAILED ACTION**

### Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.
- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-6 are rejected under 35 U.S.C. 102(a) as being anticipated by USPN 6,580,054 to Liu et al. Liu et al describe (column 9 line 57 through column 10) laser cutting and the use of a tape which is stretched and a robotic pick and place machine to remove the die from the tape for placement. The method limitations in the instant claims do not impart patentability to the die bonder apparatus.

Claims 1-6 are rejected under 35 U.S.C. 102(b) as being anticipated by USPN 4,046,985 to Gates. Gates describes laser dicing and describes (column 2, lines 6-14) tape stretching and transfer of diced units to suitable receptacles. The method limitations in the instant claims do not impart patentability to the die bonder apparatus.

## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 7-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 6,580,054 to Liu et al or over USPN 4,046,985 to Gates as applied to claims 1-6 above, and further in view of USPN 5,415,331 to Lin. Lin shows an expanding web with movable expansion frame pushup device 16 and a pushup needle or ejector pin 42 and a vacuum collet 24. The substitution of a well known transfer device as disclosed by Lin in place of the transfer devices disclosed by either Liu et al or Gates would have been obvious at the time applicant's invention was made to a person having ordinary skill in the art because the well known device operates dependably.

# Response to Arguments

Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

#### Conclusion

Application/Control Number: 10/663,726

Art Unit: 1725

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The cited art pertains to stage apparatus.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Samuel M. Heinrich whose telephone number is 571-272-1175. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, P. Ryan can be reached on 571-272-1292. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number: 10/663,726

Art Unit: 1725

Page 5

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Samuel M Heinrich Primary Examiner Art Unit 1725